

ABSTRACT

The mustard plant (*Brassica juncea* L.) is a vegetable horticultural commodity that has commercial value and good prospects. Mustard greens are popular with the public because they taste good, are easy to obtain, and are not too difficult to cultivate. And it contains many vitamins and nutrients that are really needed by the human body. Cow urine is livestock waste that comes from cow dung. Liquid cow dung waste that contains complete nutrients. Using the right concentration and nutrients will increase the yield of mustard greens, the right concentration will affect plant growth, whereas if it is excessive it will inhibit or kill the plant.

This research was conducted using a Randomized Block Design (RAK) with two factors which were repeated 3 times. So there are 12 treatment combinations, each treatment combination has 3 replications so this research has 36 experimental units. The experimental unit consisted of 8 plants so that a population of 288 plants was obtained. The first factor is the use of cow urine POC which consists of U0 (0 ml/liter of water), U1 (25 ml/liter of water), U2 (50 ml/liter of water), U3 (75 ml/liter of water). The second factor is the mustard plant variety which consists of V1 (Shinta variety), V2 (Kumala variety), V3 (Spoon variety). The parameters observed were plant height, number of leaves, leaf width, leaf chlorophyll, stem diameter, wet weight and root volume.

Keywords: *POC cow urine, varieties and mustard plants.*